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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,333	10/24/2001	Diane M. Landers	DP-304136 / DE3-0208	9601

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DELPHI TECHNOLOGIES, INC.
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EXAMINER

KOSOWSKI, ALEXANDER J

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

87

Office Action Summary

Application No.

10/033,333

Applicant(s)

LANDERS ET AL.

Examiner

Alexander J. Kosowski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-59 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 24 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/25/02, 2/25/03, 3/3/03, 8/27/03, 9/22/03, 8/16/04, 2/25/05
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

- 1) Claims 1-59 are presented for examination.

Claim Objections

- 2) Claims 6, 19, 32, 45 and 55 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Referring to these claims, they all claim a limitation which is already present in their respective independent claims.

- 3) Referring to claims 6, 19, 32, 45 and 55, the word "contract" should read --contact--.

Claim Rejections - 35 USC § 112

- 4) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 5) Claims 1, 14, 27, 40, and 50 recite the limitation "said fixtures and tooling". There is insufficient antecedent basis for this limitation in the claim. The claims all refer to selecting a contact area geometry for "tooling or fixture modeling". Since this is in the alternative, there is a choice between the two, and both cannot be claimed together as a whole in a later limitation.

Double Patenting

- 6) The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

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provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7) Claims 1-59 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-44 of U.S. Patent No. 6,839,606 in view of Rebello et al (U.S. Pat 6,430,455).

Claims 1-44 of U.S. Patent No. 6,839,606 vary from claims 1-59 of the present application in that they contain the limitation of creating extracts from a master model in the independent claims.

Rebello teaches a method of modeling in CAD whereby extracts of models at various stages are taken and used to generate such items as drawings and NC machining files (col. 2 lines 45-52).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to create extracts from a master model since this would help with the discovery of inconsistencies and since taking extracts of models in process offers the ability to incorporate agility and concurrent engineering into design processes (Rebello, col. 5 lines 40-47).

Claim Rejections - 35 USC § 103

8) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9) Claims 1-7, 9-10, 14, 27, 40, 50, 15-20, 28-33, 41-45, 51-55, 22-23, 35-36, 47 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiridena et al (U.S. Pat 5,659,493), further in view of Bhargava et al (U.S. Pat 6,219,055).

Referring to claim 1, Kiridena teaches a method comprising: selecting a contact area geometry for tooling or fixture modeling and generating a tooling model corresponding to said contact area geometry (col. 1 lines 52-64); virtual machining said tooling model to generate said fixtures and tooling (col. 4 lines 27-54); and generating machining instructions to create said fixtures and tooling (col. 6 lines 3-7). However, Kiridena does not explicitly teach that said tooling model exhibits an associative relationship with said contact area geometry.

Bhargava teaches a method of modeling whereby a tooling model exhibits an associative relationship with contact area geometry (col. 3 lines 54-67 and col. 9 lines 9-43).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize an associative relationship between the tooling model and contact area geometry in the method taught above since the ability to view parent and child relationships of features is useful and allows a user to determine the effect of modifying or eliminating a particular feature (Bhargava, col. 9 lines 35-38).

Referring to claim 2, Kiridena teaches that said contact area geometry corresponds to a dimension of said tool or fixture (col. 1 lines 52-64).

Referring to claim 3, Kiridena teaches that said contact area geometry is two-dimensional (col. 6 lines 44-51).

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Referring to claim 4, Kiridena teaches the above. However, Kiridena does not explicitly teach that said associative relationship is a parent/child relationship.

Bhargava teaches a method of modeling whereby a tooling model exhibits a parent / child relationship with contact area geometry (col. 3 lines 54-67 and col. 9 lines 9-43).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize a parent / child relationship between the tooling model and contact area geometry in the method taught above since the ability to view parent and child relationships of features is useful and allows a user to determine the effect of modifying or eliminating a particular feature (Bhargava, col. 9 lines 35-38).

Referring to claim 5, Kiridena teaches that said tooling model is a three dimensional parametric solid model generated by extruding a reference set geometry of said contact area geometry (col. 3 lines 12-27).

Referring to claim 6, see rejection of claim 1 above.

Referring to claim 7, see rejection of claim 4 above.

Referring to claims 9-10, Kiridena teaches the above. However, Kiridena does not explicitly teach that said machining instructions exhibit an associative relationship with said tooling model, and that said relationship is a parent/child relationship.

Bhargava teaches a method of modeling whereby a tooling model may be translated into machining instructions and whereby these instructions have a parent / child relationship with the model (col. 3 lines 54-67 and col. 9 lines 9-43).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize a parent / child relationship between machining instructions and model in the

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method taught above since the ability to view parent and child relationships of features is useful and allows a user to determine the effect of modifying or eliminating a particular feature (Bhargava, col. 9 lines 35-38).

Referring to claims 14, 27, 40, and 50, the claims contain identical or slightly broader limitations than claim 1. In addition, referring to claims 40 and 50, the method taught above could inherently be implemented on a computer system or computer data signal. Therefore, referring to claims 14, 27, 40 and 50, see rejection of claim 1 above.

Referring to claims 15-20, and 28-33 see rejection of claims 2-7 above.

Referring to claims 41-45, and 51-55 see rejection of claims 2-6 above.

Referring to claims 22-23, and 35-36 see rejection of claims 9-10 above.

Referring to claims 47 and 57 see rejection of claim 9 above.

10) Claims 8, 11-13, 21, 24-26, 34, 37-39, 46, 48-49, 56 and 58-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiridena, further in view of Bhargava, further in view of Rebello (U.S. Pat 6,430,455).

Referring to claims 11-13, Kiridena and Bhargava teach the above. However, they do not explicitly teach creating extracts, that said extracts comprise replicated models of said tooling model at various operations of said manufacturing, nor that said extracts are used to generate process sheets.

Rebello teaches a method of modeling in CAD whereby extracts of models at various stages are taken and used to generate such items as drawings and NC machining files (col. 2 lines 45-52).

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Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize extracts in the invention taught above since this would help with the discovery of inconsistencies and since taking extracts of models in process offers the ability to incorporate agility and concurrent engineering into design processes (Rebello, col. 5 lines 40-47).

Referring to claim 8, see rejection of claims 11-13 above.

Referring to claims 21, 34, 46, and 56 see rejection of claim 8 above.

Referring to claims 24-26, and 37-39 see rejection of claims 11-13 above.

Referring to claims 48-49, and 58-59 see rejection of claims 11-12 above.

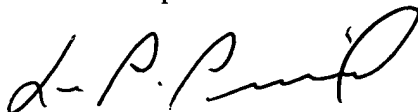
Conclusion

11) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander J Kosowski whose telephone number is 571-272-3744. The examiner can normally be reached on Monday through Friday, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. In addition, the examiner's RightFAX number is 571-273-3744.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Alexander J. Kosowski
Patent Examiner
Art Unit 2125



**LEO PICARD
SUPERVISORY PATENT EXAMINER
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